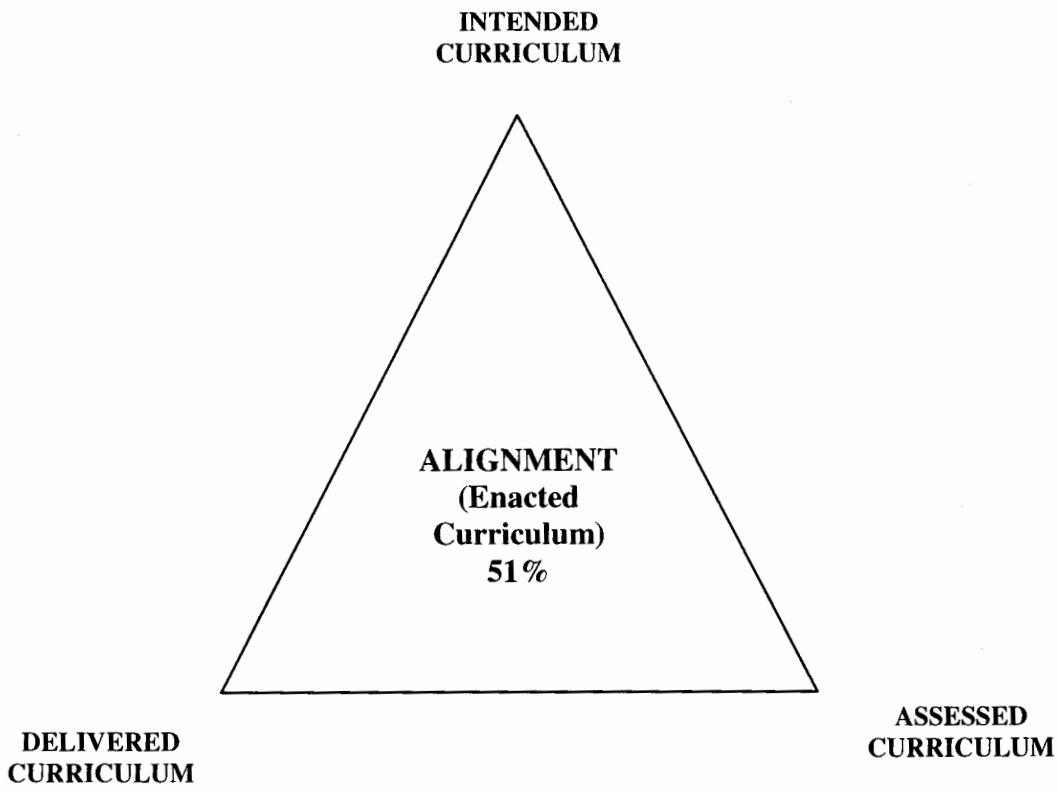

Intended Curriculum – State Standards – EALR's, GLE's

Assessed Curriculum – WASL – classroom – district etc. (lack of priority in the GLE's if all of them are a priority then none of them are a priority, and we are still a mile wide and an inch deep.)

Delivered Curriculum -- The extent to which the Intended Curriculum is effectively delivered based, on data

So why only 50%?

Lack of strong curricular alignment/guidance

- Program – primary - intermediate - middle - high school
- With Standards
    - Content vs Process
    - Pedagogy
        - Teachers are influenced by what they think about their students, about what students bring to the instruction, students' possible ideas about the content at hand, and about the trajectories of their learning that content

- They change the lessons , they eliminate what they do not value, thus curriculum developers designs turn out to be ingredients in—not determinants of—the actual curriculum
- Teachers work with their own understanding (misunderstanding) of the material
- They make the curriculum "easier" for students
- The curriculum that counts is the curriculum that is enacted
- Teachers and parents regularly reject curricular innovations

Content Specialists are needed in all elementary schools

The same resources need to be applied to mathematics that have traditionally been given to reading

All districts need strong, consistent, on-going professional development, assistance in aligning their curriculum, instruction, and assessment in order to build a K-12 system for students to move through effectively and efficiently.

Utilize technology to assist in the intervention and support of current mathematics programs

From the TIMSS (Third International Mathematics/Science Study and PISA (Program for International Student Assessment) conclusions: 2006

- Study results argue against a sole focus on improving secondary school mathematics. U.S. efforts to improve mathematics performance must include doing a better job in the lower grades. Generally speaking, a country's initial performance is correlated with its later performance.
- The study results support a balanced instructional approach that stresses the importance of instruction in both basic and higher-order skills.
- The mathematical preparation of K-8 teachers should be strengthened.
- The U.S. curriculum should increase topic intensity. The current curriculum covers too many topics with too little intensity.

If mathematics education is to improve, Our students no longer have the luxury for teachers to remain "free agents" in Mathematics Education.